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Northwoods Journal

July 2007

Enjoying and Protecting Marinette County's Outdoor Life

IN THIS ISSUE

Visit Marinette County's new and improved website!

Go to *www.marinettecounty.com* to check out the new look. Keep up to date on area events and programs, get online resources from county departments, find forms and documents online, and get information on how to contact your county officials.

Marinette County Forests Today

By John Neilio, Forest & Parks Administrator
Photos courtesy of the USDA Natural Resources Conservation Service

Mission & Goals

The mission of the county forest is to manage and protect its resources on a sustainable basis. The overall goal is the planned development and management of the county forest for optimum production of forest products, together with recreational opportunities, wildlife, watershed protection and stabilization of stream flow, and giving full recognition to the concept of 'multiple use' to assure maximum public benefits.

Management

Today the Forestry and Outdoor Recreation Committee oversees the management of a 231,600-acre forest. The forestry staff has evolved to twelve people, which includes an Administrative Secretary, five Foresters, a Scaler, and five Equipment Operators with a full complement of construction equipment. The Equipment Operators are centrally located at Amberg and work on County Forest Road construction and repair, plantation site preparation, forest maintenance projects, construction of recreation trails and construction and repair of parks facilities.

Recreation

All recreational activities on the county forest have been assigned to a professionally trained recreation specialist who, along with his staff of four full time and nine seasonal employees, supervises and maintains all county-owned recreational developments both on and off the forest. Today the county forest has several developed parks, as well as miles of hiking, biking and cross-country ski trails. There are over 190 miles of ATV trails and 200 miles of snowmobile trails.

Forest Types

The timber types of the county forest are broken down in the following manner:

- 104,200 acres (45%) of the county forest is aspen.
- 41,600 acres (18%) of the forest is hardwood.
- 25,400 acres (11%) are pine, about half being plantations started since the 1930's.
- 32,400 acres (14%) is swamp.
- 27,800 acres (12%) include areas such as alder swamp, brush and grassy openings, road and utility right-of-way, lakes and streams.

The county has dedicated a ruffed grouse management unit located two miles south of Dunbar. This area is more than 1,600 acres in size consisting mostly of aspen, demonstrating how forestry and wildlife go hand-in-hand.

Timber Harvest

There are 225 miles of state funded county forest roads maintained by our forestry crew, providing access for logging. These roads also allow access by the public into the forest for recreation. Many of these roads are designated snowmobile and ATV trails. The forestry crew prepares 200 acres of harvested pine areas for replanting each year. Most planting today is contracted out to hand planting crews. The forestry staff at Wausaukee is responsible primarily for taking

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MARINETTE COUNTY FORESTS continued

care of the nearly 150 timber sales ongoing throughout a normal year. County forest timber sale revenues reached the $1,000,000 mark for the first time in 1986. Actually, our timber sale revenues have been over a million dollars annually since 1992. In the last six years the amount of wood removed annually has averaged a little more than 50,000 cord equivalents. The timber sales program couldn't be where it is today without the excellent cooperation of over 30 timber contractors. Most of these people and their employees reside and raise their families in the county.

The Future of Our County Forests

We can provide excellent recreational opportunities for the public while maintaining a well-planned, sustainable yield timber sale program and creating revenue. In 2006, the County Forest brought in a record $2.28 million in gross timber sale revenue. We are able to enjoy these benefits because of the vision of the county board in 1930 and the management of the county forest for more than 70 years. The Forestry Department continues to closely manage the county forest with timber harvests that provide natural regeneration, as well as planting new trees, so that future generations can enjoy the recreational and economic benefits of the Marinette County Forest.

Northwoods Journal

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Northwoods Journal focuses on various outdoor recreation opportunities and local environmental topics to inform readers about natural resource use, management, and recreation in Marinette County.

Published in cooperation by:

- Marinette County Land Information Department, Land & Water Conservation Division
- Marinette County Parks & Outdoor Recreation Department
- University of Wisconsin-Extension

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http://www.marinettecounty.com

THE SALAMANDERS OF MARINETTE COUNTY

By Greg "The Egg" Cleereman, County Conservationist
Photos courtesy of A.B. Sheldon and Dan Nedrelo

Salamanders may be the most common animals you've never seen. In fact, research has found that salamanders per acre can outnumber and outweigh birds and mammals combined. However, because they are active at night and don't call like frogs, we may never know salamanders are around. Even when you do see one, you may think it's a lizard. However, when you pick up a salamander the differences from lizards are obvious. Salamanders are cool and moist to the touch, which matches their preferred conditions. Their soft skin can be quite colorful. They don't bite or scratch and are quite harmless to people. Six species of salamanders, divided into four groups, can be found in Marinette County:

- Mole Salamanders: Blue-spotted Salamander and Spotted Salamander
- Lungless Salamanders: Red-backed Salamander and Four-toed Salamander
- Newts: Eastern Newt
- Mudpuppy

Adult Mole and Lungless Salamanders, and Newts in the eft stage, prefer moist wooded areas. They usually avoid forests subject to flooding and forests that have been disturbed, burned, or logged. These terrestrial creatures spend most of their time under ground as deep as 4.3 feet. Even at the surface, they stay mostly under leaf litter or in or under rotting logs. Salamanders use tunnels dug by other animals or follow cracks in the soil - they don't dig their own burrows. The Blue-spotted Salamander is the species most likely to be seen above ground in wet periods. Terrestrial salamanders eat a wide variety of arthropods and other invertebrates including earthworms, spiders, slugs, snails, and centipedes.

Blue-spotted Salamander

The Eastern Newt differs from other terrestrial salamanders in that it metamorphoses from aquatic larva into a non-breeding terrestrial stage called an *eft*. After a period of time on land, it changes again into the fully aquatic breeding adult. While on land, the eft lives a life similar to the Mole Salamanders. The aquatic adults eat small aquatic invertebrates, including crustaceans and insect larvae.

Eastern Newt

Mudpuppies are fully aquatic. In clear water they tend to be nocturnal, hiding under rocks during the day. In areas with thick vegetation they can be active during the day as well. Although Mudpuppies generally walk along the bottom, they can swim and have been found in water depths of up to 100 feet. They feed mostly at night on a wide variety of aquatic life, including crustaceans, insect larvae, worms, fish and their eggs, other amphibians, and carrion. Fish, water snakes, and herons eat Mudpuppies.

Mudpuppy

The Mole Salamanders breed in the spring after returning to temporary or permanent ponds. Unlike frogs and toads, salamander eggs are fertilized internally. During or after a species-specific courtship ritual, male salamanders deposit a jelly-like glob capped with sperm, called a *spermatophore*. The female then crawls over the spermatophore and takes up the sperm through her vent. The female stores the sperm a few hours or up to a year until eggs are laid. Depending on water temperature, eggs hatch into externally gilled aquatic larvae in a few or several weeks and later turn into terrestrial adults. Salamanders that lay eggs in water do not stay with their eggs.

Four-toed Salamander

The Lungless Salamanders breed in the fall and lay their eggs out of water. The Red-backed Salamander lays its eggs underground or in a cavity in a rotten log in a grape-like cluster suspended on a gelatinous stalk, while the Four-toed Salamander favors a small cavity in clump of sphagnum moss over water. Eggs hatch, depending on species and temperature, in three weeks to two months. Upon hatching, Four-toed Salamander larvae crawl or simply drop into the water, where they will stay until metamorphosing into adults in three to eight weeks. Young Red-backed Salamanders do not have an aquatic stage. In both species, the female stays with the eggs to defend them and keep them moist with secretions from her body. *SALAMANDERS continued on page 6*

Shoreline Erosion: Problems and Solutions for Your Waterfront Property

By Chuck Druckrey, Water Resource Specialist

It's no secret that lake and riverfront property values have always been high and have increased even more in the last 20 years. Frontage on a larger lake can bring $10,000.00 per foot, and a lot on a smaller lake or river can cost four or five times more than a lot without water frontage. Given the increased value, it's not surprising that owners are concerned when they see their precious shoreline disappearing into the water. While their concern may be legitimate, it's a fact that "erosion happens." Lakes and streams are dynamic systems and that narrow band where water meets land is always changing.

So how much erosion is natural? On lakes the natural rate of shoreline erosion is typically very low. Over thousands of years, lakeshores reach a balance where waves and ice shape the shoreline and native plants hold the soil and resist natural wave action. In these cases, the amount of natural erosion is minimal and is easily tolerated. In other cases, especially on small sheltered lakes, the table is turned and the land slowly advances, filling in the lake with vegetation and dead organic matter. Factors that affect the natural rate of erosion of lakes include bank shape, soil type, plant cover, near-shore water depth, wind direction, and lake size.

Erosion is a much more dynamic process on rivers. Over time, all rivers migrate from side to side, eroding one bank while depositing sediment on the other. This wandering creates the wetlands and floodplains bordering most streams, and cuts off portions of river channel creating oxbow lakes and sloughs. While the process of channel migration is often slow, it is relentless. Like lakes, the natural rate of erosion depends partly on bank conditions, but on rivers the most important factors are the speed of the current and the angle at which it strikes the bank.

While some shoreline erosion is clearly natural, we humans have a bad habit of making changes to the shore that accelerate the process. The primary culprit is removing native vegetation that has adapted to growing on shorelines. These native plants typically have deep root systems that bind the soil and hold the shoreline in place. They are also adapted to withstand the repeated abuse of flooding and ice damage. The landscape grasses and shrubs we replace them with are not as good at holding the shoreline in place or resisting the normal environmental abuse found on the shoreline.

People have also added to the problem by increasing the amount of wave energy striking the shore. On lakes, natural waves are very predictable and remained unchanged for thousands of years. Depending on location many lakeshores rarely experience waves sufficient to do much damage. Enter the powerboat - now even the most sheltered shoreline can experience large waves capable of eroding the shoreline. On smaller lakes the waves generated by a busy weekend of skiing and fishing focus more energy on the shore than it would normally experience over an entire year!

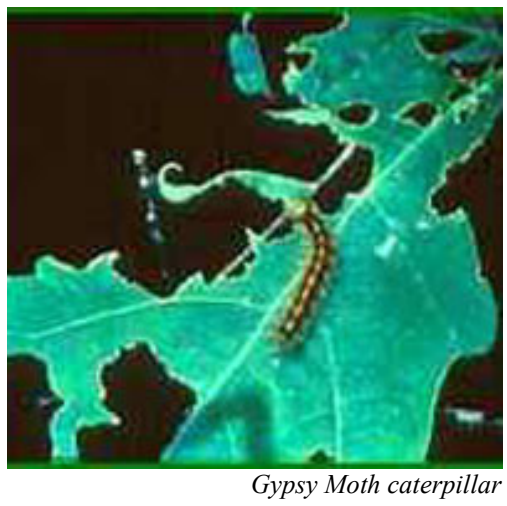
So if you find that your shoreline is falling into the water, what do you do? The first thought that comes to many minds is to build a wall. A sea wall makes a great dividing line between land and water, and if properly built it never changes. Unfortunately, sea walls are terrible for the lake. They offer no aquatic habitat and form a barrier for fish, insects, and amphibians that would normally use the shoreline. For this reason the Wisconsin DNR seldom permits sea walls on lakes or streams.

EROSION continued on page 7

An Overview of Exotic Invasive Species

By Kendra Axness, UW-Extension Basin Educator
Photos from the Wisconsin DNR

Have you wondered about the thumbnail-size mussel shells that blanket the beaches of Lake Michigan and Green Bay? Have you admired the clusters of beautiful purple flowers filling roadside ditches along U.S. Highway 41 in August? If so, then you've noticed two of Wisconsin's most common exotic invasive species: zebra mussels and purple loosestrife. While the shells are small and the flowers are pretty, they and other exotic invasives have a major impact on Wisconsin's landscape.



Gypsy Moth caterpillar

Exotic species are plants or animals that have been introduced to an ecosystem beyond their native range. Invasive species are able to spread rapidly throughout a water body or land area because they lack natural predators, are able to out-compete native species for food and habitat, or both. Some exotic species do not become invasive (if, for example, they cannot survive a Wisconsin winter). Some native species, such as cattails, can become invasive if the conditions are just right for their growth. The most worrisome species are those that are both exotic and invasive, and are likely to cause economic or environmental harm or harm to human health.

Emerald Ash Borer

Exotic species have been hitchhiking their way into Wisconsin for decades. As global trade has expanded and humans' ability to alter the landscape has increased, so too has the movement of exotic invasive species. For example, the St. Lawrence Seaway was completed in 1959 and allowed ballast water from international ships to reach the Great Lakes, setting the stage for a whole host of invaders, from Eurasian ruffie to zebra mussels. About 162 species of exotic aquatic organisms have established a foothold in the Great Lakes, with more than one-third of those introduced in the last 35 years – a surge that coincides with the opening of the Seaway.

While it's possible that organisms can be transported by wind or on animals, most exotic invasive species reach Wisconsin through human activities. Some species have been intentionally introduced to the environment; for example, in the 1890s, the Wisconsin Fisheries Commission introduced the common carp to Wisconsin's waters as a food source. Others species are unintentionally introduced by ships' ballast water, recreational boaters or anglers, or fishing-related industries such as bait suppliers and the aquarium/aquaculture trade. In addition, aquatic pathways are not the only way for invaders to reach Wisconsin: the emerald ash borer, an insect that poses a very serious threat to millions of ash trees, was found in Michigan in 2002 and likely arrived in packing materials carried in cargo ships from Asia. Purple loosestrife was brought to the U.S. as a landscape plant in the 1800s and subsequently spread to natural ecosystems.

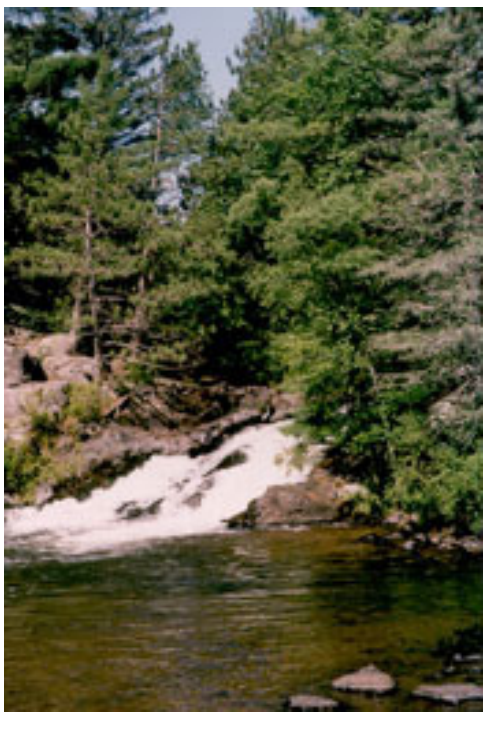
Once an exotic invasive species has been introduced to an area, it is often difficult, if not impossible, to eradicate. Instead, the best option is to limit the population to a small area and to use a control strategy that doesn't seriously harm other organisms. The control strategy varies based on the characteristics of the invading organism. Sea lampreys can be controlled with a species-specific toxin. Eurasian water milfoil, once established in a lake, can be managed by mechanical harvesting. Biological controls are sometimes available, as is the case with purple loosestrife: a specific beetle that eats only loosestrife has been introduced in Wisconsin and has helped control its spread.

Purple Loosestrife

The best management strategy is to prevent invasive species from being introduced in the first place. Prevention is possible when individuals learn about the problem and then take action. There are several educational programs in Wisconsin that are raising awareness of invasives issues. The "Clean Boats, Clean Waters" volunteer watercraft inspection program trains volunteers to talk to boaters at landings about invasive species and to check boats and trailers for signs of invasive species. Each year, the Wisconsin Council on Invasive Species sponsors a statewide poster contest for youth, coordinates June Invasive Species Awareness Month activities, and recognizes individuals who are making a difference through its "Invader Crusader" awards. The Wisconsin Department of Natural Resources and UW-Extension jointly fund an Aquatic Invasives Education Specialist who works with agency staff and citizen volunteers to ensure that they have the resources and support that they need to do invasives education. For more information go to *http://invasivespecies.wi.gov* or visit the Wisconsin DNR website at *http://dnr.wi.gov/invasives.*

Meet Marinette County's Parks & Outdoor Recreation Department

By Erik Aleson, Assistant Parks Administrator



This article is part of a series focusing on Marinette County departments that are involved in protecting the environment, enhancing your outdoor experiance, and working on the land. In May 2007, Marinette County created a Public Works Department. This new department is made up of the Highway, Maintenance and Facilities, Forestry & Land, and Parks & Outdoor Recreation Departments. The Marinette County Parks & Outdoor Recreation Department coordinates and directs administrative and management functions of the County Parks System to ensure that the natural resources of Marinette County are managed and protected on a sustainable basis, park properties and facilities are kept in good condition and that adaqute outdoor recreation is provided for our citizens and visitors.

The Parks & Outdoor Recreation Department operates eleven large "developed" parks, six small "day use" parks and waysides, seven boat landings, and a youth camp. We also provide information for recreational opportunities such as snowmobile/ATV trail systems, hiking trails, and touring the waterfalls on County Forest land. The Parks & Outdoor Recreation office serves as an information source for residents and visitors on three main areas: County Parks & Campgrounds, Camp Bird Youth Center, and Outdoor Recreation opportunities.

County Parks and Campgrounds

There are 21 County Park properties to explore. See table below to find out what is offered at each park. For more information about Marinette County Parks, please call (715) 732-7530, or visit online at *www.marinettecounty.com* (first click "Departments" in the left-hand menu, then go to the "Public Works" tab, and last click the "Parks" tab). All vehicles require a day use entrance sticker. The cost is $3.00 per vehicle per day. A Day Use sticker can be used at all Marinette County Parks the day it's purchased. Stickers are to be purchased at the pay station when entering a park. A $12.00 (per vehicle) Marinette County Parks Annual Vehicle Sticker may be purchased at the Parks Office in the courthouse or various businesses in the County. The sticker is valid at all Marinette County Parks for that year. Lodges for day use rental are available at Lake Noquebay, Morgan and Goodman Parks. Goodman Park also has a cabin available for overnight rental.

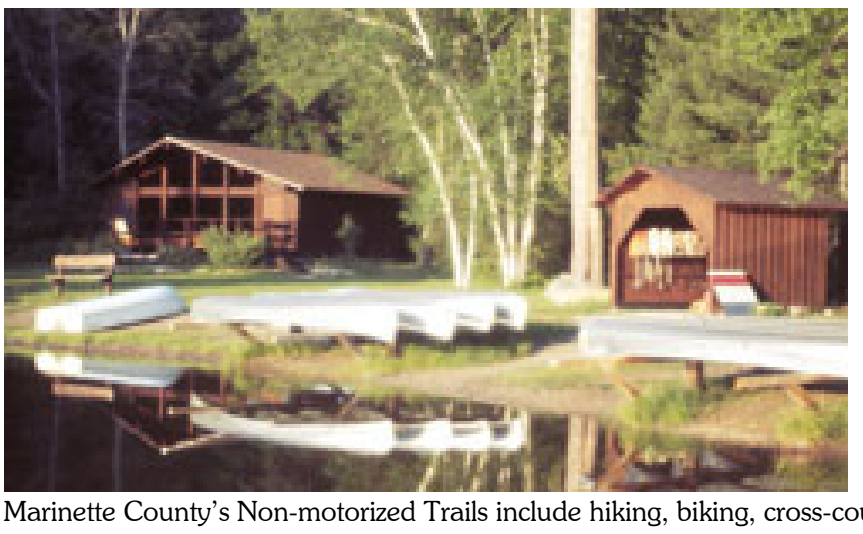
At the county campgrounds you can go picnicking, hiking, fishing, boating, whitewater rafting, or just enjoy the beautiful scenery. Of the eleven developed parks, six offer well-kept, beautifully wooded campgrounds. Parks and the number of campsites available at each are as follows: Twin Bridges (62), Morgan (32), Goodman (15), Veteran's Memorial Park (15), Twelve Foot Falls (11), and McClintock (10). Campers receive two day-use stickers for two vehicles for each night they are registered to camp. Camping fees for first come, first serve sites are $15.00/night for electric sites and $10.00/night for non-electric sites. Camping is available on a first come, first served basis at all Marinette County campgrounds and a separate camping fee is required. Reservable campsites are available at Morgan Park and Twin Bridges Park. These two campgrounds have electricity at every campsite and are more suited for camper trailers & RVs. Odd-numbered sites at both parks are reservable and even-numbered sites are always first come, first served. The remaining four campgrounds are non-electric. To make a reservation for a campground or lodge rentals, please call or visit our office in the County Courthouse. The office is open for park reservations from 9:00 a.m. until noon, and 1:00 - 3:00 p.m. Monday through Friday. Call the parks office at (715) 732-7530 for camping reservations at Morgan and Twin Bridges Parks, lodge rentals at Lake Noquebay, Morgan and Goodman Parks, Menominee River shelter, and the Goodman Park cabin.

Marinette County Park Properties

# on Map	County Park Properties	Size in Acres	Camping	# of campsites	Electricity on each site	No Electricity Sites	Showers	Flush Toilets	Vault Toilets	Drinking Water	Picnic Tables	Grills/Firerings	Lodge/Shelter	Playground	Hiking	Waterfalls	Swimming	Fishing	Boat Access	Body of Water
1	Twin Bridge Park	94.0	X	62	X		X	X	X	X	X	X		X	X		X	X		High Falls Reservoir
2	Morgan Park	160.0	X	32	X				X	X	X	X	X	X	X		X	X	X	Timms Lake
3	Goodman Park	240.0	X	15		X			X	X	X	X	X	X	X	X		X		Peshtigo River
4	Veteran's Memorial Park	320.0	X	15		X			X	X	X	X		X	X	X		X		Thunder River
5	Twelve Foot Falls Park	160.0	X	11		X			X	X	X	X			X	X		X		Pike River
6	McClintock Park	320.0	X	10		X			X	X	X	X	X		X	X		X		Peshtigo River
	Total # of campsites			145																
7	Thunder Mountain Overlook Park	160.0							X		X				X					(Not on a water body)
8	Dave's Falls Park	66.0							X	X	X	X		X	X	X		X		Pike River
9	Menominee River Park	65.0	1 canoe site						X	X	X	X	X					X	X	Menominee River
10	Dolan Lake Park	60.0							X		X						X	X		Dolan Lake
11	Lake Noquebay Park	11.0							X	X	X	X	X	X	X		X	X	X	Lake Noquebay
12	Michaelis Park	1.5							X		X	X					X	X		Lake Michigan (Green Bay)
13	Long Slide Falls Wayside Park	40.0													X	X		X		Pemebonwon River
14	Crystal Springs Wayside Park	10.0									X							X		Menominee River
15	Twin Islands Wayside Park	2.0									X							X	X	Menominee River
16	Saler Boat Landing	33.0																X	X	Menominee River
17	Twin Creeks Boat Landing	9.0																X	X	Menominee River
18	Bear Point Boat Landing	2.0							X		X							X	X	Menominee River
19	Little River Boat Landing	2.0							X									X	X	Lake Michigan (Green Bay)
20	Cox Boat Landing	1.5							X									X	X	Menominee River
21	McAllister Boat Landing	0.7							X									X	X	Menominee River
	Total Acres of Park Properties	1757.7																		

Camp Bird Youth Center

The Camp Bird Youth Center is the property of Marinette County and is located on County Forest Land. This beautiful camp is located on scenic Sand Lake (20 acres in size). It has a sandy swimming beach, docks, canoes, rowboats, stream and lake fishing, 10 acres of mowed lawn, huge red pines, oak trees, hiking trails, an adventure course, a nature center building, and a recreation building. There are 42 well-kept, log cabin style buildings at the camp. We can accommodate groups as small as 50 people or as large as 230 people. The camp has modern kitchen facilities, a dining center, sinks, showers, flush toilets, and electricity. If you would like to see our facilities at Camp Bird, it would be our pleasure to arrange a tour. For further information or to make a reservation, please contact us. Camp Bird is available for rental by youth groups (school, educational, environmental and religious groups) from the first week of April through the end of November. We would also like to encourage scout groups, universities, environmental and educational groups, churches, and other organizations to contact us to for information about using the facilities at Camp Bird. The facility can also be reserved for large group activities like reunions, weddings, corporate retreats, or meetings/conferences (new in 2007).



Outdoor Recreation in Marinette County

The Marinette County Parks & Outdoor Recreation Department provides local residents and tourists with quality recreational experiences through our system of parks, boat launches, and waysides to enhance countywide tourism and private businesses. Most of the outdoor recreation for which we provide information is for camping on county land (parks or County Forest), the county's Recreational Trail System (motorized & non-motorized), and the many waterfalls in Marinette County. The self-guided "Waterfalls Tour" provides a fun, family-friendly way to get back to nature. Families or individuals can enjoy ATVing, snowmobiling, hiking, biking, canoeing and kayaking, hunting, fishing, and even whitewater rafting!

The county's Motorized Trails are a system of snowmobile and ATV trails coordinated by the department for the enjoyment of residents and tourists and to provide economic development for Marinette County. There are currently 494 miles of state funded snowmobile trails and 232 miles of state funded ATV trails in Marinette County. Marinette County's Non-motorized Trails include hiking, biking, cross-country skiing, snowshoeing, and canoeing.

Who You Gonna Call?

Spotlighting natural resource and conservation professionals working in Marinette County so you know who to call with questions or concerns.

John Neilio, Forestry & Parks Administrator
1926 Hall Ave., Marinette WI 54143
(715) 732-7525 or (715) 732-7530
email: *jneilio@marinettecounty.com*

What do you do as part of your job?

I make sure that both the Forestry and Parks programs follow the county's Comprehensive Plan, county policies, and state laws. I also create and oversee the budget for both departments and obtain grant funding for programs and projects, as well as working with the staff on the annual work planning. Examples of ongoing forestry projects requiring grant funding include county forest road maintenance, improving wildlife habitat, and procuring operating funds for the department. Parks projects include improving recreational trails and waterways, campground maintenance and upgrades, and Camp Bird improvements. There is a big advantage to having both the Forestry and Parks Departments working together on projects, since both departments are very self-sufficient.

What is your favorite part of the job?

I am a forester by trade and have always enjoyed working in the woods. I really enjoy planning a project and then seeing it completed - it gives me a sense of accomplishment. For example, we have plans for the Crystal Springs wayside on highway 180. We want to add a parking area, picnic tables, and some walking trails. It's still in the planning stages, but we hope to start working on it this fall.

What are some current projects the Departments are working on?

Ongoing Forestry projects include the timber sales program, maintaining the county forest roads, preparing sites for tree planting after timber harvests, and controlling invasive species using eradication methods such as aerial spraying, as was recently done for gypsy moths at Morgan and Twin Bridge Parks. The Parks department recently upgraded several campsites at Morgan and Twin Bridge Parks as well as installing showers and flush toilets at Twin Bridge. We hope to secure more funding to continue upgrading facilities in other parks. We'd also like to expand and create more seasonal campground areas. Another major project is building a new Arts & Crafts facility at Camp Bird, as well as making improvements on some of the other camp buildings.

John is in his 35th year with Marinette County. Previous to his current position, he was Assistant Forest Administrator. For more information about forests or parks, visit the Marinette County website at *http://www.marinettecounty.com*, click on "Departments" in the left-hand menu, and then click "Public Works". There is a menu with both "Forestry" and "Parks" tabs.

Native Landscape Trees: American Hazelnut

By Scott Reuss, UW-Extension Horticulture/Agriculture Agent
Photos by Gary Fewless

The American Hazelnut, *Corylus americana*, is an extremely hardy member of the birch family that is very common in the native Marinette County landscape. It is potentially underutilized as a landscape shrub, especially when considering its immense value to wildlife. This is a true shrub, with a width usually approximately equal to its height. It does relatively well in a wide variety of soil conditions, but prefers well-drained, sunny areas. It is one of the few shrubs that does reasonably well in our sandiest soils, and thus is the dominant shrub in oak savanna areas. When placed into a landscape, it offers some distinct characteristics. As seen in the picture (from UW-Green Bay Herbarium web page), it has large, simple leaves that impart a coarse textural appearance when viewed at shorter distances. However, its relatively rounded shape tends to soften the appearance when farther away. The growing season leaf color is a dark green, so it can add some color variation, as well. Fall color is also very nice, with a bronzish-yellow to bronzish-red appearance. There are also commercial cultivars available of this species with more dramatic fall color.

It commonly grows from 4-8 feet, but if it's in a more fertile spot and well cared for, it can reach 15 feet in height. Although not tall, it does grow to its mature height relatively quickly. One of the benefits of this species is its use by wildlife. The nuts that are produced are key food sources for a variety of species including squirrel, deer, turkey, woodpeckers, and many other mammals and birds. Ruffed grouse also feed heavily on the male catkins during winter. It also fills a key bird/small mammal cover & nesting niche in the landscape. Of course, one should not overlook the fantastic flavor of the nuts for human consumption – the nuts are tough to crack, but the flavor is well worth the effort.

The American Hazelnut can be purchased from many landscape plant sources. You can also transplant young specimens from one spot on your property to another, or from other private properties if you have permission. Anyone can legally collect the mature nuts from shrubs found on public land and then either consume them or plant them. It is not legal to collect live plants from public land, however. If you have any plant selection or other horticultural questions, contact Scott or Linda at the Marinette County UW-Extension office, 715-732-7510 or toll-free at 1-877-884-4408. You can also visit the UW-Extension web page at *http://www.uwex.edu/ces/cty/marinette.*

Outdoor Fun With Kids: The Micro-Hike

Ever wonder what fun activities you can do with your kids while on a hike? Or on a camping trip? Or what to do with a group of energetic children? Here's an idea for a fun, hands-on, nature-related activity you can do outside with just a few materials.

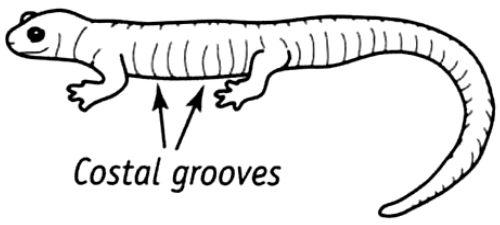
This activity is appropriate for ages 3 and up - older kids can make observations and compare what they find. You will need magnifying glasses, 3'-5' lengths of string or twine (1 each per child), and if needed, paper and pencils for making observations.

A micro-hike is an expedition guided by a string 3-5 feet long. The "hikers" cover the trail inch-by-inch, low to the ground and viewing nature up close. Begin by asking children to put their strings over the most interesting piece of ground they can find. Then give each child a "magical" magnifier, to shrink him/her down to the size of an insect. At the start of the micro hike, tell them they must keep their eyes no higher than one foot above the ground (demonstrate how high that is for younger kids). You might want to ask questions to stimulate their imaginations: where they are, what other things inhabit their space, etc. Older kids can take exploratory field notes and compare to others what they find. You can alter this activity by omitting the string and allowing kids to roam over a certain area that you designate (outlining an area with rocks, etc.)

This activity taken from Joseph Cornell's book *Sharing Nature with Children* (1998).

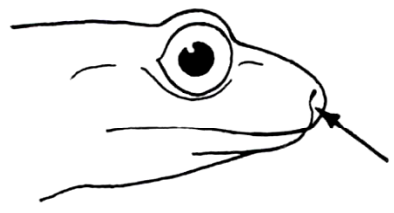
SALAMANDERS continued

Blue-spotted Salamander



Salamanders are quite distinctive and easily identified with a little practice. Mole Salamanders have prominent vertical creases along their sides, parallel to their ribs, called *costal grooves*. The Blue-spotted Salamander (3" to 5") has blue spots on a black or grayish-black background. The Spotted Salamander (4" to 10") has two rows of yellow spots along its body on a black, dark gray, or brown background. Lungless Salamanders are small (2.3" to 5") and narrow. They all have a groove in the skin running between each nostril and the upper lip, called a *nasolabial groove*. The Red-backed Salamander has tiny legs and a rounded tail. They may 50 have a reddish stripe running from the back of the head to the tail bordered in black. There is also a color phase known as "leadback" in which the red stripe is absent, leaving the salamander entirely dark. The Four-toed Salamander is very small (2" to 4"), reddish brown, and has only four toes on the back feet. The sides are grayish with dark flecks. The long tail narrows where it joins the body. Aquatic adult Eastern Newts (2.5" to 5.5") are olive, or reddish brown above and have black spots on their back and tail. Sometimes they may have a row of red dots along their sides. Terrestrial efts (1.4" to 3.4") are red or orange above and light yellow below. Efts have tails that are round rather than the flat tails found on adults. Mudpuppies are large (8" to 19") and have reddish gills behind the head. They are brown or gray with dark spots.

Red-backed Salamander



Nasolabial groove

Salamanders play an important and interesting role in our forest ecosystems. Due to their sheer numbers they are food (depending on their life stage) for insects, fish, birds, reptiles, and mammals. In response, salamanders have several defensive strategies. The Eastern Newt, for example, becomes completely still when attacked, with its back arched and its head and tail raised. This pose, called the *Unken reflex*, serves as a warning and as a way to eliminate any movement that might trigger further attack. Newts and other salamanders secrete toxic or distasteful chemicals to deter predation. The Four-toed Salamander can voluntarily drop off its tail, which continues to twitch while the rest of the salamander crawls away. They quickly re-grow a new tail. The Mudpuppy has a lateral line, similar to fish, that detects changes in water pressure to alert the animal to nearby predators and prey. In addition to re-growing their tail, salamanders have been found to regenerate toes and even full limbs. Some can even produce new eye lens tissue. Regenerated salamander limbs are resistant to tumor growth. Even when tumor cells were injected in laboratory testing, the tumor was reprogrammed to become harmless. Scientists are studying salamanders to determine how these phenomena can benefit people. All the salamanders are known to eat insects and their larvae. Eastern Newts are especially voracious predators of mosquito larvae.

Fortunately, our salamanders are generally quite common and populations are stable. The exception is the Four-toed Salamander, whose breeding requirements of dense moss over water seem to limit its abundance. All the other terrestrial salamanders need to thrive is leaf litter and logs on the forest floor, moist underground retreats, and suitable breeding spots. Most species hibernate in and under rotting logs or underground, and sometimes congregate in favored hibernation spots (an exception is the Mudpuppy, which does not hibernate and is active throughout the year). Some years insufficient snow cover allows frost to penetrate the ground deep enough to cause substantial mortality. Research has shown that habitat destruction, fragmentation, and alteration are the main threats to salamanders. Increasing road density is separating salamanders (and other amphibians and reptiles) from breeding areas and causing heavy mortality during migrations. Loss of the tree canopy results in decreased leaf litter and a drier forest floor.

Salamanders are an often unnoticed and under-appreciated part of the north woods. Although this brief article only tells a small part of their story, hopefully it will help you see these fascinating creatures with greater understanding and respect. To learn more, read the two main publications this article is based on: *Amphibians and Reptiles of the Great Lakes Region*, by James H. Harding and *Amphibians of Wisconsin*, published by the WDNR Bureau of Endangered Resources.

WHERE IN MARINETTE COUNTY?

Tell us where this picture was taken and you could win a prize!

Send us a note including your name, address, and phone or email *awarren@marinettecounty.com* to give us your answer. Any interesting facts about the photo are welcome. **Please respond by July 16, 2007.** Correct answers are entered into a drawing for a $20 gift certificate from Wal-Mart.

Congratulations to Sue Trottier of Wausaukee for correctly guessing June's photo! This round barn was in the town of Porterfield near the corner of County Roads G and E. It was torn down a few years ago, but it was once featured in the Milwaukee Journal.

VHS WARNING! Viral Hemorrhagic Septicemia (VHS) is now highly likely to have infected this water system, but please realize that *fish are safe for human consumption*. **Don't move bait, live fish, or water from any infected waters - anything that has been in contact with infected waters must be disinfected.** To disinfect, mix 1/3 cup bleach with 5 gallons of water. Apply solution to the hull, trailer, livewell, bilge, and any other areas or things that may hold water or moisture. Leave solution in contact with these areas for at least 5 minutes before rinsing off (do not rinse bleach solution into rivers or lakes). Other ways you can help prevent the spread of VHS include: never moving fish or fish eggs to other waters and only buying bait from Wisconsin bait dealers; inspecting boat and equipment and remove any visible plants or animals; dispose of leftover bait in the trash; and report any large numbers of dead fish or fish with bloody spots to your local DNR authorities. For more information on VHS, please visit the Wisconsin DNR website at *http://dnr.wi.gov/fish/pages/vhs.html*.

EROSION continued

If they can't build a wall, most landowners turn to the next "best" thing… stone riprap. While not as environmentally damaging as sea walls, traditional riprap greatly reduces natural shore cover and removes the very shallow water habitat needed by juvenile fish. Because of this, traditional riprap - once allowed on all waters - is limited to streams and large lakes with high wave energies. New restrictions on riprap also limit their application to minimize their environmental and aesthetic impact. While rock was often placed to the top of the bank, new permits limit the rock to the expected wave height on lakes or the ordinary high water mark on streams.

So if sea walls and riprap are out, what's left? Another option is using natural vegetation. Often this entails simply planting native trees, shrubs and groundcover plants on the shoreline. If that isn't enough, there are a variety of methods that use native plants and biodegradable materials to "harden" the shore while native vegetation becomes established. Collectively these methods are referred to as *bioengineering*. In cases where native vegetation alone isn't enough, the DNR can issue a permit for *vegetated armoring*. This method is a hybrid that offers the strength of riprap with the environmental benefit of biological erosion control. Stone is placed up to the ordinary high water mark and the bank above it is planted with native species that can resist periodic flooding and ice damage. Often shrubs are planted in the riprap itself to help hold the stone in place and provide additional habitat.

How does one determine the level of protection required and what permits are needed? The DNR website (*www.dnr.state.wi.us*) has a shoreline erosion calculator that allows you to calculate wave energy at your site and steers you to the applicable erosion control methods. The type of permit depends on the chosen method. For questions about permits call DNR Water Management Specialist Robert Rosenberger at the Peshtigo DNR office (715-582-5000).

Designing Shoreline Erosion Control That Works

A tour of area lakes reveals some rather creative shoreline stabilization projects. In addition to the typical "couple loads of rock", you can find recycled cement blocks, creosote soaked timbers, and used tires armoring the shore. While some of these do-it-yourself projects have worked, many more have failed due to improper design. Due to obvious environmental concerns the latter are no longer allowed! So where can a landowner get assistance? In Marinette County you can call the County Land & Water Conservation Division at 715-732-7780. Department staff have experience designing and installing traditional riprap and biological erosion control measures.

It is particularly important to seek professional advice if you are dealing with stream bank erosion or if you are on the shore of Green Bay. The energy associated with large wind driven waves and moving water can be substantial, and follows that the level of protection required to stabilize these sites can be significant. Failure to account for these forces can lead to premature failure and lots of wasted money, time, and effort.

Northwoods Journal Online

Would you like to read the *Northwoods Journal* on the web? Each issue is posted monthly on the Marinette County website at *http://www.marinettecounty.com*. On the website, visit the Land Information Department page, click on the "Information & Education" tab and then click the "Northwoods Journal" tab on the menu at right. We can even send you an e-mail reminder when each new issue is posted. To set it up, email Anne at *awarren@marinettecounty.com* or call 715-732-7784.

Where Are the Planets This Summer?

Dr. Paul S. Erdman, UW-Marinette

People sometimes wonder where to see the planets and how to tell planets apart from stars. When a constellation has a bright object in its normal pattern, that object is either a new star (a nova) or a planet (meaning "wanderer"). Such new appearances in the sky are quickly recognized by those familiar with normal constellation patterns. But what about people who only look at the night sky occasionally? Because the planets rotate around the sun, they are always moving through the background of stars in the sky. The closer the planet is to the sun, the faster its motion, and the faster the planet changes its position in the sky. This motion is too slow to notice on any given night, but it is so well defined by the laws of physics that astronomers can predict the position of the planets for years into the future. With computer technology this can be done on any home computer with commercially available software. Such software was used to generate the information in this article, which will hopefully help you to spot the planets this summer.

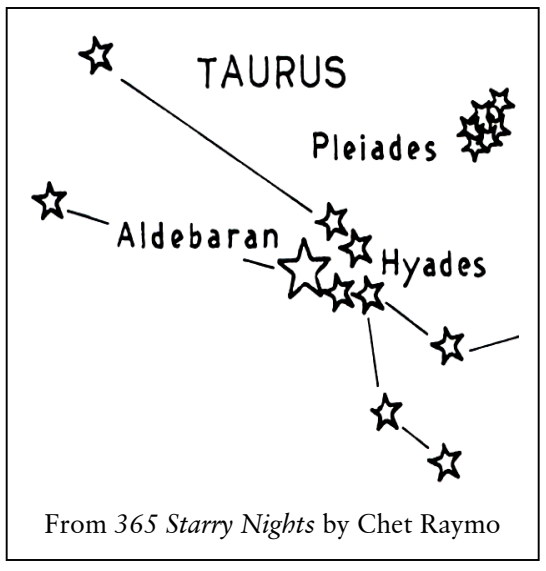
Let's begin our tour of summer planets with the most prominent planet in the sky, **Venus**, which is currently seen after sunset - hence its nickname, the "Evening Star". Venus is so bright at the beginning of the summer that the only things in the sky that are brighter are the sun and the moon. If you look at the brightest point of light in the west after sunset, you can be sure you are seeing Venus. By August 1st, it will be setting only half an hour after the sun. By August 7th, it will set at the same time as the sun and will no longer be our "Evening Star".

The phases of Venus – photo from the *Peterson Field Guide to Stars & Planets*

On the evening of July 16th, the crescent moon is near Venus - it will be to the left of the moon and will be the brightest of three points of light near the thin crescent. To the upper right of Venus will be the star *Regulus*, part of the constellation *Leo*. On the right side of the moon will be the planet **Saturn**. This would be an excellent time to get out a telescope and see if you can see the rings of Saturn, craters on the moon, and the crescent phase of Venus. You may be surprised to see Venus appear as a tilted crescent – it is moving between us and the sun, and is turning its dark side towards Earth. It was not known that Venus had phases until Galileo first observed Venus with his telescope – he used the Venus phases as proof to convince people that the planets rotated around the sun, not the Earth. Also, see if you notice another effect that helps distinguish planets from stars: stars twinkle and planets do not. Regulus should look like it twinkles, while Venus and Saturn shine with a steady light.

The phases of Venus – photo from the *Peterson Field Guide to Stars & Planets*

The second brightest planet in the sky is **Jupiter**, and this summer we will be fortunate to have an excellent view of it in the southern sky. After June 5th, Jupiter will be rising earlier and earlier so it is already up in the sky as it turns dark. Jupiter will be the brightest and most obvious sight in the southern sky close to the horizon. Throughout summer, Jupiter will spend time above *Antares*, the bright red heart of the constellation of *Scorpius*. If you have a telescope, or even a good pair of binoculars, take a look at Jupiter. You should be able to see the four largest moons of Jupiter – Io, Callisto, Ganymede, and Europa (you may not see all four because some might be behind Jupiter). Look again the next night and you'll see them in different positions – this led Galileo to understand that he was seeing moons going around Jupiter, and this is why we call these four largest moons the "Galilean satellites".



From *365 Starry Nights* by Chet Raymo

Mars won't be a spectacular planet for the casual observer this summer. It isn't as bright as Venus or Jupiter, but may still be as bright and red as a nearby red giant star called *Aldebaran*. This star can be recognized by its position at the left tip of a v-shape of stars that make up the majority of the winter constellation *Taurus* (visible in summer if you stay up late enough). Aldebaran is sometimes referred to as "the eye of the bull". To the right of the v-shape is a group of stars that some people see as a very, very miniature dipper. The little formation of stars is more commonly called the "seven sisters" and officially called the *Pleiades*. On August 15th look for Mars exactly halfway between the Pleiades and Aldebaran. Of the five planets visible to the naked eye, **Mercury** is perhaps the hardest to find because it always rises and sets so near to the sun. It may get as bright as the brightest stars, but it is only above the horizon when twilight still lingers. You may see it, however, on the evening of September 13th when it will appear to the right of the thin crescent moon around 7 o'clock. Another chance may be on September 21st when Mercury will nudge up very close to the bright blue giant star *Spica*, in the constellation *Virgo*.

Area Events Calendar

June-August **Sunset Concert Series**. Tuesday evenings on Stephenson Island, Marinette. Call 800-236-6681 for more information.

June-August **Bands at Badger Park.** Sponsored by Peshtigo Women's Club, free admission. Bands on July 11, July 25, August 15, and August 22. Call 715-582-0566.

June-August **Crivitz Ski Cats Water Ski Shows**. Most Wednesday & Saturday evenings at 6:30pm at Lake Noquebay Park. Call 715-854-7000 for more information.

June-August **Twin Bridge Ski Club Water Ski Shows**. Every Thursday at 7:00pm & Saturday at 6:30pm at Stephenson Town Park, 12 miles west of Crivitz at boat landing #3 on High Falls Flowage. Contact 715-757-3511 for more information.

July 4 **Marinette 4th of July Celebration** on Stephenson Island. Activities include: fireworks, 4th of July parade, children's games, 5k run/walk, music, and food. Admission is free. Call 1-800-236-6681 for more information.

July 4 **Crivitz Area Fourth of July Celebration**. Parade, ice cream social, fun, games, fireworks.

July 4 **Fourth of July Celebration at Lake Hilbert**. Concession stands, fireworks. Contact 715-336-2107 for more information.

July 7 **Aurora MACC Run 5k walk and 10k run**. Start time, 8:00am. Pre-registration requested. Call 800-236-6681 for more information.

July 14 **Menominee River Float Trip**, 11:00am at Wausaukee Boat Landing. Bring your own tubes, Ends at Bear Point. Call 715-856-5092 for more information.

July 14 **Athelstane Volunteer Fire Dept Picnic**, 11:00am parade; picnic to follow. Athelstane Fireman's Park. Raffles, adult & children's water fights, food, refreshments, children's games. Music by *C'est La Vie*. Call 715-759-5006 for more information.

July 14 **Hooter Shoot & Cookout.** Crivitz Bow Club Range, W9398 County Road W, Crivitz. Shoot begins at dark (flashlights only please).

July 20-22 **Coleman Annual Firemen's Picnic** at Albers Memorial Field. Food, refreshments, raffles, prizes, games, more. Parade Saturday, 10:00am. Live music Friday and Saturday nights. Fireworks Saturday. Call 920-897-4254 for more information.

July 20-22 **Cruisin' 50's Concert & Car Show**. Green Acres Campground, 6 miles west of Marinette on Hwy. 64. Call 800-236-6681 or visit www.greenacrescruisin50s.com.

July 21 **Peshtigo Chamber 2nd Annual Community Day**. 9:00am-4:00pm. Downtown Peshtigo. Flea & craft market, sidewalk sale, music, concessions, children's games, stagecoach rides, sidewalk sale. Contact 715-582-4237 for more information.

July 21 **Arts & Crafts Show at The Red Apple**, corner of Hwy 141 and Cty. W, Crivitz. 9:00am-3:00pm. Artists and crafters from Wisconsin, Michigan and Illinois. Contact 715-854-7191 for more information.

July 21 **Wagner Firefighters Fundraising Picnic**, 12:00-8:00pm at Menominee River County Park, Hwy. 180 & Cty. X. Food, refreshments, games, music. Call 715-732-9593 for more information.

August 2-5 **25th Annual Waterfront Festival**. Great Lakes Memorial Marina Park, Menominee, MI. Entertainment, food, parade, fireworks, children's activities. Contact 800-236-6681 for more information.

Meet our Summer Intern!

Meet Randy Fish, the Land & Water Conservation's summer intern. Randy comes to Marinette county from Walnut Creek, an area near San Francisco. He has been attending Michigan Tech University in Houghton, Michigan for the past year earning his Master's Degree in Natural Hazard Mitigation. He will be working with department staff on various projects and tasks, including GIS mapping and surveying, administrative duties, and education. "I've always been interested in environmental conservation, and even more interested in conservation efforts at the local level, so I hope to see if this is something I want to do as a career path". After the summer, Randy hopes to work for some type of non-governmental organization (NGO) in South America until he deploys for service in the Peace Corps next spring. Welcome to Marinette County, Randy!

Spokes & Folks Bicycle Club

www.spokesandfolks.com

Guests are welcome, helmets are required. Lights are recommended on some rides.

July 2007 Ride Schedule
(See website for more details)

Saturday Morning Rides
May 5-August 25 leave at 8am
Meet at the Marinette City Park near the restroom. From June through August, rides are longer, approximately 45 miles.

Wednesday Night Fast Rides
Leaving from Cycle Path at 6pm on Wed. nights. Anyone can join, but if you don't keep up, you will be left behind. Contact: Adam @ 906-863-9361.

Bikin' to the Bar & Grill - Sat. July 14
Leave Marinette City Park at 3:30 pm and ride out to River Road in Menominee & back in on Birch Creek Road to the Pullman House & Whistle Stop. For more information contact Vern at 715-732-4341.

Marinette-Oconto Ride – Wed. July 25
Meet at Marinette City Park at 9am and ride to Oconto and back.

Farmers' & Flea Markets

Amberg Flea & Farmers Market
Occasional Saturdays, Amberg Antiques & Sweets, Hwy. 141. Call 715-759-5343.

Crivitz Flea Market
Thursday mornings-mid afternoons, through August 30th, downtown Crivitz. For more information call 715-854-2030.

Marinette Main Street Farmers Market
Tuesdays, Fridays & Saturdays, 7am-noon June-August at Main Street Market. Located at Merchant's Park, corner of Main & Wells Streets in Marinette. Call 715-732-5139 for more information.